

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF AIR AND RADIATION

MEMORANDUM

May 4, 2000

TO: ENERGY STAR® Computer and Monitor Partners

FROM: Andrew Fanara, Program Manager, U.S. Environmental Protection Agency

RE: Two Clarifications: (1) Operating Systems and ENERGY STAR Compliance and

(2) Single Low-Power Mode for Monitors

Below are two clarifications from the ENERGY STAR Office Equipment Program. The clarifications address two separate issues regarding (1) computer operating systems and ENERGY STAR compliance, and (2) a single low-power mode for monitors. These clarifications come as the result of Partner questions on these issues. Please note that this document also can be found on the ENERGY STAR Web site at http://www.epa.gov/appdstar/esoe/manufacturers.html.

Both clarifications are effective immediately. If you wish to refer to the Version 3.0 Computer and Monitor MOUs, you can access them via the Web site at http://www.epa.gov/appdstar/esoe/mous.html.

Computer Operating Systems and ENERGY STAR Compliance

My purpose in issuing this correspondence is twofold: (1) to ensure that all Partners are aware of EPA's position on computer operating systems and ENERGY STAR compliance, and (2) to proactively take steps to avoid some of the confusion that arose with Windows NT 4.0. While EPA has been assured that Windows 2000 has the power management features necessary to meet the ENERGY STAR Program requirements, I feel the operating system issue is an important one that warrants periodic reminders to all Computer and Monitor Partners.

As operating systems are a critical element of a computer, the current Computer MOU (Version 3.0) specifically addresses them in Section IV.F as follows:

"Operating Systems: The proper activation of a computer's low-power/"sleep" mode is typically contingent upon the installation and use of a particular version of an operating system. If a computer is shipped from the Partner with one or more operating systems, the computer shall be capable of entering and fully recovering from the low-power/"sleep" mode while running in at least one of those operating systems. If the computer is not shipped with operating system software, the Partner shall clearly specify which mechanism will render the computer ENERGY STAR-compliant. In addition, if any special software, hardware drivers, or utilities are necessary for the proper activation and recovery of the sleep mode, they must be installed in the computer. The Partner shall include this information in product literature (e.g., user's manual or data sheets) and/or on

its Internet Web site. Brochures and advertisements shall be worded to avoid misleading statements. See Guidelines for Proper Use of the ENERGY STAR Name and International Logo (Attachment A)."

By providing this language in the MOU, it is EPA's intention that the low-power/"sleep" mode functions completely and effectively with the installed operating system(s) or, when operating system software is not provided, with the operating system(s) specified by the manufacturer. Similarly, EPA believes that it is the manufacturer's responsibility to inform the customer of any software or hardware necessary for the operation of the ENERGY STAR features. With all of the options available on computers today, it is inconceivable that a customer would know or understand all of the implications of his or her choices. Further, if some of these choices are incompatible, it is the manufacturer's responsibility to raise this to the customer's attention so he or she can prioritize them.

As I've stated numerous times before, both in written documents and at industry meetings, EPA believes that the computer power management features should function seamlessly. When exceptions to this rule arise, the manufacturer should inform and educate the customer because it makes good business sense and to do otherwise conflicts with the spirit of the ENERGY STAR Program.

Single Low-Power Mode for Monitors

EPA wishes to clarify that Partners may utilize a single low-power mode of 8 Watts or less in their monitors to comply with the ENERGY STAR guidelines. Section IV.D of the ENERGY STAR Monitor MOU (Version 3.0) states:

"Monitors that have the capability to proceed automatically from active mode to a low-power mode of 8 Watts or less comply with the power consumption requirements of this agreement."

Therefore, it is <u>not</u> necessary for an ENERGY STAR compliant monitor to enter two successive sleep modes (≤ 15 Watts and ≤ 8 Watts) <u>if</u> its first sleep mode meets the more energy-efficient requirement of consuming 8 Watts or less.

When shipped, the monitor must enter this single low-power mode of 8 Watts or less after 30 minutes or less of user inactivity. Please refer to Figure 1 (attached). Section IV. G. of the Computer MOU (Version 3.0) addresses monitor control:

"Partner can choose to set the computer to activate the monitor to enter the second low-power or "deep sleep" mode directly within 30 minutes of inactivity (i.e., the computer can activate the monitor to bypass the first sleep mode and enter the second deep sleep mode)."

Please note that this default time of 30 minutes or less is identical to the default time for the first low-power mode in the two-mode scenario.

As always, it is imperative that EPA and its Partners work together cooperatively to maintain public confidence in the ENERGY STAR Program. Please feel free to contact me by phone at 202-564-9019 or email at mailto:fanara.andrew@epa.gov to discuss any specific questions or concerns regarding these clarifications. Thank you for your serious attention to these matters.

Figure 1: Single Low-Power Mode for Monitors Beginning Active of Mode Inactivity Power Monitor Enters Deep Sleep Consumption Mode after 30 Minutes or (Watts) less of Inactivity (i.e., T_1 - T_0 # 30 minutes) T_0 T_1 **Deep Sleep Mode of 8 Watts or Less Period of Inactivity** T_0 T_1 T_n Time (minutes)